

SONY

MPEG-2 Networked Video Server



MAV-70

MAV-70: The Video Server That Keeps Your Options Open

Instant access without fast-forward or rewind. Multiple recording streams. Multiple playout streams. Simultaneous recording and playout. With capabilities like these, broadcast servers deliver important new operational alternatives, new money-saving efficiencies and new money-making opportunities. But to fulfill their promise, servers must not only meet today's needs, they must anticipate tomorrow's. And that raises some interesting questions.

Where will your operation be in three years? Will you be handling standard definition, high definition or both? Interlace or progressive? Will your equipment be connected in analog, SDI, or by a data network? Will your video be handled as video or data? The fact is, the Sony MAV-70 MPEG-2 Networked Video Server is ready. With the MAV-70, you don't need to decide any of these issues in advance. The MAV-70 performs brilliantly today, and it keeps your future options open.

Input/Output Options

Some servers lock you into a handful of inputs and outputs. The MAV-70 will support up to ten simultaneous streams, configurable as inputs or outputs. It's also extensible via FibreChannel interconnection.

File Transfer Options

In addition to real-time interfaces, FibreChannel and Ethernet interfaces enable you to transfer material as data files – up to twenty times faster than real-time over FibreChannel (for 8 Mbps video data rate material).

Interface Options

Plug-in interface boards enable you to connect analog composite NTSC/PAL, component digital SDI signals and MPEG-2 transport streams.

MPEG-2 Compression Options

The MAV-70 is built around the MPEG-2 family of compression standards. You can select MPEG Profiles, Levels and bit rates on a clip-by-clip basis to meet your business objectives. You can choose compressed or uncompressed audio. The Vertical Blanking Interval is passed compressed with an uncompressed option to handle your most demanding data requirements. Throughout everything, you retain frame accuracy and full trimming capability.

MPEG-2 Transport Stream Options

Compress your signals elsewhere and the MAV-70 can record them without going back to baseband. And the DVB-ASI format it accepts and gives out is a world-wide standard.

High Definition Options

The MAV-70 will support 4:2:2 Profile @ High Level as well as Main Profile @ High Level. And the MAV-70 will be able to play out SD and HD simultaneously.



Automation Options

The MAV-70 operates under the control of a growing number of third-party automation systems – in addition to Sony's own software.

Options for Added Capacity

At 8 megabits per second, a single MAV-70 has the capacity for 29 hours of video – over 3,000 commercials. And you can configure up to eight MAV-70 chassis as a single server, for up to 232 hours of storage.

Data Tape Options

The MAV-70 can connect to inexpensive data tape for hundreds of thousands of hours of near-line mass storage.

The Most Important Option of All

When you choose the Sony MAV-70, you choose peace of mind. You will benefit from the same proven Sony components that already supply thousands of server streams, and you will be amazed by Sony MPEG refinements that elicit superlative picture quality from modest bit rates. You will also enjoy the technical resources of the company that is defining digital. And you will rest secure in the knowledge that you're backed by Sony's extensive service and support programs.

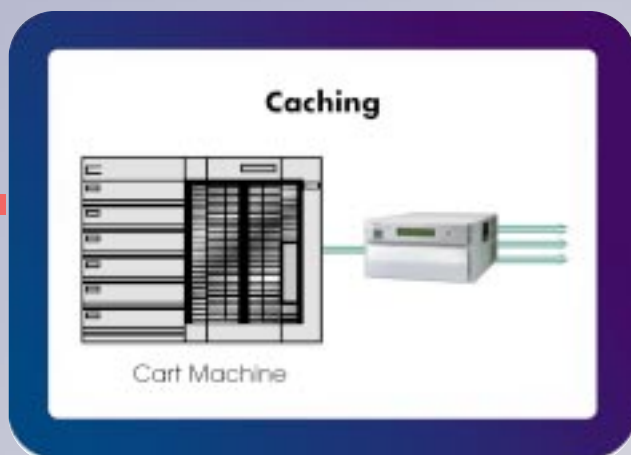
MAV-70 Input/Output



MAV-70: Applications That Make Dollars and Sense

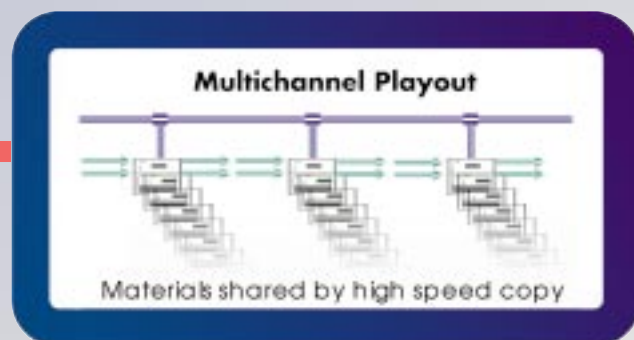
Caching

Our customers report a 70% reduction of cart machine usage. That means 70% less headwear, 70% lower maintenance costs – and correspondingly longer life expectancy from that cart machine of yours. The MAV-70 supplements your existing cart machine in an affordable, sensible migration to server-based playback.



Multichannel Payout

Multichannel transmission offers opportunities to consolidate operations. That's why Sony designed the MAV-70 to support multichannel payout. You can payout multiple playlists simultaneously from one MAV-70 or configure several MAV-70s as separate servers, operating under unified control. It's ideal for Local Marketing Agreements, DTV multi-casting, cable environments and satellite TV.

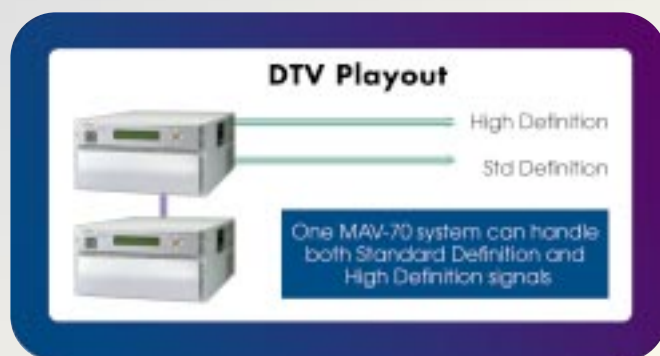


Cart Replacement

When you are ready to retire your cart machine, you can free up a lot of real estate. In five rack units of space – the same as a Sony Betacam® VTR – each MAV-70 holds 126 GB of RAID 3 storage. At 8 megabits per second, this equates to 29 hours of video – over 3,000 commercials. One or two MAV-70s hold a typical station's entire active commercial library. So you can store far more video in far less rack space – with far less maintenance.

DTV Payout

The MAV-70 server is equally adept at handling both 16:9 and 4:3 standard definition as well as high definition signals. So you're fully prepared for the world of DTV broadcasting and DTV/NTSC simulcasting.

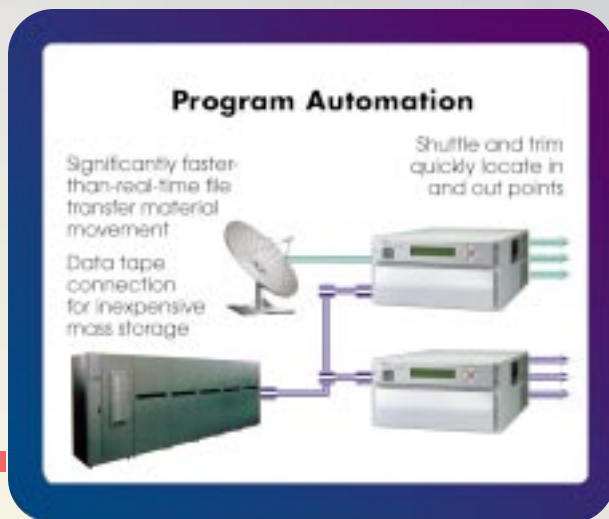


Timeshift/Network Delay

The MAV-70 is the clean and simple way to record and play syndicated programming or to delay your network feed. Thanks to Sony's MPEG-2 compression, you'll transmit pictures of superb quality. And thanks to Sony's server flexibility, you'll be able to play out the program while it's still being recorded.

Program Automation

The MAV-70 is superbly well suited to long form programming. You can use inexpensive data tape as your mass storage medium. File transfer speeds the required footage into the server. And Sony's Shuttle and Trim functions enable you to quickly locate In and Out points.



Store-and-Forward Distribution

Cataloging and filing national commercials is costly and labor intensive. Now, a single station can perform this task for an entire station group. Thanks to FibreChannel and Ethernet interfaces, the MAV-70 can send and receive filed material using automated file transfers, industry-standard data protocols and inexpensive telco links. This is just one example of new opportunities open to you.



Asset Management

The new technology of Digital Asset Management means no more sending search parties into the stacks, looking for old footage. The MAV-70 is the ideal gateway to a near-line data tape archive – like Sony's DMS-8400 PetaSite® system. The MAV-70 excels at the ingest and playout of files.

Hardware that Has No Equal, Ready for Software that Knows No Limits

Sony MAV-70 MPEG-2 Video Server

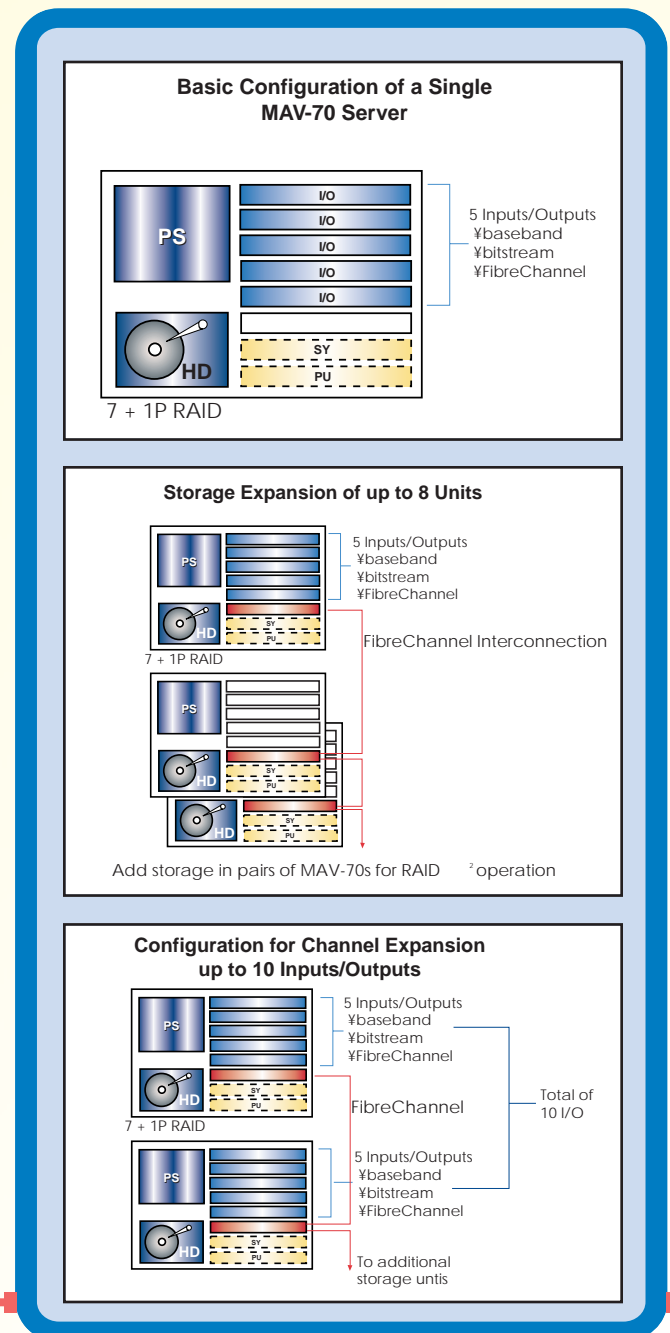
FEATURES

- MPEG-2 compression using Sony MPEG refinements for superb picture quality at low bit rates.
 - Selectable MPEG Profiles, Levels and bit rates on a clip-by-clip basis.
 - Compression Input/Output configuration:
- High reliability with RAID 3 storage, hot swappable components and optional redundant power supply unit.
 - File transfer capability through optional FibreChannel and Ethernet network interfaces; up to twenty times real-time transfer at 8 Mbps (video data rate).
 - Open architecture and software control protocol, for compatibility with third-party applications.

PROFILE	# of I/O	BIT RATE	GOP	RAID
4:2:2P@ML MP@ML	10	8 Mbps	long	RAID
4:2:2P@ML MP@ML	10	15 Mbps	long	RAID ²
4:2:2P@ML	5	50 Mbps	short	RAID ²
4:2:2P@HL MP@HL	5	45 Mbps	long	RAID ²

Greater than 5 I/O, greater than 15 Mbps, available soon.

- Frame-accurate access, even with long GOPs, fully trimmable even after the fact.
- Supports four channels of compressed or uncompressed AES/EBU digital audio in SD, eight channels in HD.
- Supports AC-3 compressed audio signals.
- Support for Vertical Blanking Interval (VBI) data including closed caption data, sub titles and VITC, offering compressed and three lines per field uncompressed options for the ability to pass high frequency data.
- Compact, self contained chassis only 5 rack units high, the same as a Sony Betacam VTR.
- Internal storage for 126 GB of data using 18 GB Hard Drives – equivalent to 29 hours at 8 Mbps (video data rate).
- Expansion capability – eight RAID units combine for up to 1008 GB of data, equivalent to 232 hours at 8 Mbps.



Sony Application Software

The MAV-70 was designed to operate under the control of third-party automation software and Sony's own FlexSys™ suite of transmission system applications. If you know Sony's Betacart®, LMS® or Flexicart® software, you'll be immediately familiar with the FlexSys Graphical User Interface. FlexSys software consists of a suite of applications that offer the following attractive options:

- Multichannel Playout - Automates up to nine channels of playback from server and/or tape. Standardized interface to traffic is included.
- Automated Media Management - Automates the movement of media within a Sony system. It operates on interconnected components that can include baseband video storage (LMS and Flexicart systems), data tape storage (PetaSite system, DMS-B35) and the MAV-70 server. Without operator intervention, material missing from the playout server is automatically identified, prioritized and copied. And least-needed material is automatically deleted from the playout server.
- Time Shift - Automates the recording of input feeds for later playback.
- Multichannel Management - Establishes distributed control for up to 32 channels from up to 32 workstations. After clearing password security, any operator at any workstation can select services for direct monitoring and transmission playlist control.

BZA-820	Single Channel Playlist
BZAA-821	Additional Single Channel Playlist licenses
BZAA-822	Copy Manager software
BZAA-823	Time Shift
BZA-900	Multichannel Management

Third-Party Software

Thanks to open protocols, a software development kit and the gathering momentum behind Sony servers, the MAV-70 operates under a continually growing range of third-party applications.

Automation

- Cyradis
- Drake
- Florical
- Ibis
- Louth
- MicroFirst
- Probel

Commercial Distribution

- DG Systems (interface to FlexSys application)
- Vyvx

Data Storage Management

- Avalon

Sony SupportNET™ Agreements

We are proud of our superb hardware performance legacy. That's why Sony can protect the MAV-70 with a one year on-site parts and labor warranty and a five year warranty on the hard drives. And to keep the MAV-70 operating at maximum potential, Sony offers SupportNET agreements. With a SupportNET agreement, you're assured of optimum performance to full specifications at a fixed price so you can control your maintenance budget. You've got priority access to product experts, up-to-date software, technical support, training programs, product guides and technical papers. And when you need immediate solutions, Sony Technical Support Engineers are available.

For more information on a SupportNET agreement tailored to your specific needs, call Sony's Business Information Center (BIC) at 1-800-686-SONY (7669) or your local Sales Account Manager.

SUPPORTNET

SONY

www.sony.com/broadcast

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